



EXCHANGE REPORT

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Introduction

On my third semester, September 2019 – January 2020, of Architectural Technology and Construction Management I went abroad to Austria. I chose to apply for an exchange at FH Salzburg as they specialize in timber construction. Studying in Austria would be an opportunity to refresh my German and gain an academic level. Furthermore, being an enthusiastic climber and hiker, the blissful and calm surroundings of the valley south of Salzburg was the perfect place for me to spend a semester.

CLASSES

I was mainly attending classes from the study “Forest Products Technology & Timber Construction”, where they have three different specializations: Timber Technology, Timber Construction and Furniture- and Interior Construction. I also attended classes from “Smart Building” and “Design and Product Management”.

The structure at FH Salzburg is a bit different from what I was used to at KEA as the regulars have a lot of 1-2 ect. point classes and small written exams for many of them. The international classes were though made up of more points pr. class. I chose to have some classes in English, but most in German as only few courses relating specifically to building construction (only one) was offered in English. The teachers were very helpful regarding the language challenge I had and most offered me to do the exam in English.

The list of the classes I took is rather long and I will provide a grouped description of them.:

Wood sciences

Wood Science - Wood Anatomy 1 ect. point (German)

Wood Physics 1 ect. point (German)

Wood Chemistry 1,5 ect. point (English)

These three classes gave a basic understanding of how wood is built up, which properties it has and how this affects the way it can be used for construction.

Wood based materials

Introduction to Engineered Wood Products 2 ects points (English)

Introduction to different materials based on wood; CLT, GLT, plywood, OSB, MDF, Fiber boards etc. Specifically, the course taught about the production line and processing of each product.

Construction

Building & Timber Construction 1 – 1 ects point (German)

Building & Timber Construction 3 – 1 ects point (German)

These two classes were on first and third semester. They explained the basics of construction. The first taught a broad range from how planning is divided in different phases to what sustainable construction is and which different methods for construction there is. The third semester course went into what the function of the different building elements are, what to be aware of and how they can be build up - based on mostly wooden construction.

Engineering

Introduction to Structural Engineering – 1,5 ects points (German)

Timber Constructions 1 – 3 ects points (German)

R-Stab – 1 ects (German)

These three courses were engineering oriented. The first is about the load distribution in a building and how to calculate the different stresses. The second teaches about how to calculate the load capacity of a building element and see whether it can resist load applied. It taught about the different load influences on a building, and which norms there are both in European terms and more specifically in Austrian. In the last class we were taught how to use the program R-Stab to design structural frame and truss constructions by calculating internal forces, deformations, and support reactions. In the end of the R-Stab course a certificate is granted that shows that you know how to use the program.

Visual construction

CAD Practical Exercises – 1 ects point (German)

Graphics & Layout - 1 ects point (German)

Planning and Design - 1 ects point (German)

In the CAD course we were taught to use Archicad and the final task was to design and make technical drawings of a Tiny House. Graphics & Layout gave an introduction to InDesign and Photoshop. We learned how to use the softwares to make posters for presentations and portfolios and how to edit graphics. Planning and design

focused on interior design/construction. We learned about what is to be considered when designing interior spaces. We were given the task to design the interior of an apartment of maximum 30m². We had to come up with a concept for using the small space and creating different spaces for living there. We were also considering and choosing materials and colors for the apartment.

Alpine hut project

Project 3 - Construction, Technology or Furniture – 3 ects points (English)

The construction project was about the renovation or construction of a new alpine hut. We visited an alpine hut and had a talk with the representative of the association that owns the hut. They asked for proposals for both ideas for the renovation of the hut and for a new alpine hut. We worked in groups and came up with design proposals for the plans, build-up of the exterior walls and technical systems and presented several times throughout the development during the semester. For the final presentation the representative from the hut was there and would with the lecturer choose the best idea which would be further developed next semester going more into the physics and structure of the building.

Life cycle analysis

Environmental Accounting | Life-Cycle Costs – 2 ects points (German)

This course is from the bachelor of Smart Building. We learned about LCA and LCC and how it is used to valuate and compare different options for the construction of buildings. We used different programs and were introduced to reliable databases to calculate the impact and costs.

Hand Drawing

Visual Communication 1 – 5 ects points (English)

Visual Communication 1 & Project – 2,5 ects points (English)

Visual Communication is a two-week course from the Bachelor of Design and Product Management. In the first week we were taught hand drawing techniques for industrial design from making lines and circles to coloring the drawings. In the second week we had to develop a product by using the learned drawing skills and making a final presentation of the process of the drawing development.

Full descriptions for all classes can be found on the website of the university, either on the incoming site or on the specific curriculum.

Academic Experience

Choosing of classes and settling at the university

The receiving school was in general helpful with the choosing of classes and settling me in at the university. The university has two different campuses and I was attending classes at the smaller. This was due to the fact that I took classes in German with the regulars - courses for incomings are mostly held at the bigger campus. The introduction week was held on the campus where I didn't study, which didn't make much sense only regarding getting to know the incomings at that campus.

We had a learning agreement session with the international coordinator where we would choose our courses. She was very helpful, but I would have wished to have a talk with the faculty leader or lecturers who would know more specifically which courses would suit my former knowledge and go well together. In general I found it a bit hard to have to choose and combine classes from so many small classes.

Most rewarding classes chosen

I enjoyed many of my classes and especially found it interesting to dig into the physics and structure of wood to understand the properties of the material and how it can be used.

The Alpine hut project was a project working together with the real world, which I found very motivating. It was interesting to get to design the spaces of a hotel with restaurant and other shared spaces.

I liked the challenge of the engineering-oriented classes as they gave me some valuable skills on how to calculate the forces in a building.

Finally I found it practical to learn how to navigate InDesign and Photoshop as they are good tools to have for making presentations both at university and later for professional use.

Least relevant chosen classes

"Introduction to engineered wood products" is about the technological production and processing of wood-based materials and therefore I found it a bit irrelevant for my studies. It was though one of the only classes offered in English in the specific study program and it was also interesting.

"Visual Communication" is hands on class for learning how to draw by hand and can be a good tool to have as an architectural technologist. They teach industrial design drawing which is a very specific technique. I didn't find the second part about developing a product design relevant for construction.

Both classes of "Building and Timber Construction", especially the first, are quite basic and a lot of the things taught are taught at earlier semesters at KEA. They were though good for getting a construction vocabulary in German.

Advice on choosing classes for other KEA students going to FH Salzburg

If I should give some advices on which courses to choose, I would say that it really depends on interests.

For construction I would advice to be brave and choose some courses from third, fourth and fifth semester, depending on what is available. They specialize from third semester and the construction classes can be a bit introducing. Classes I didn't choose but think sound very interesting are fire protection of wood, construction details, building physics and joining of wood.

I would advice to take the engineering classes to really learn how to do the calculations.

I would also recommend looking into the curriculum at “Smart Building” as they have some very interesting courses. The program is about energy-efficient building technology and sustainable building. It is possible to do courses where certificates for Passive House planning etc. are received at the end. The one back-draw is that they have classes Friday, Saturday and Sunday only as a lot of them has a full-time job beside the studies

Cultural/Personal Experience

Cultural Challenges. I chose to have a lot of classes in German and not really being a part of the incoming group, as this gave me the possibility to have the most relevant classes, which was one of my main goals studying at FH Salzburg. This gave me challenges as the regulars mostly spoke German which, for me, was still a challenge. I though found a group of regulars that I enjoyed spending time with and soon felt well integrated.

Best personal experience during studies abroad. What I enjoyed most about being in Austria was to live in a small village surrounded by the most beautiful mountains. In the fall I have been doing excursions weekly to different mountain huts going both hiking and climbing. In winter I went skiing to the most popular skiing areas of Austria literally in my back yard.

The city of Salzburg, 20 min. away with train, is a beautiful city with many cultural offers and live music on different bigger and smaller venues daily. Salzburg is a city with a lot of students from the different universities which gives it a rich diversity.

Advice to KEA students going to study at FH Salzburg. At FH Salzburg there is the possibilities of staying in the city or at the countryside and the choice of having international classes or choosing more specific classes about construction in German. I think both can be interesting and it all depends on what the motives for going on an exchange is. Anyone who likes to live near natural surroundings with access to the beautiful mountains with the city still near would enjoy an exchange to Salzburg.

Practical Experience

Application process. The application process was very easy and both KEA and FH Salzburg were very helpful.

Settling. I found it easy to settle in Austria as I already spoke some German and the culture is not very different from the Danish. At the university they offered social activities that made it easy to get integrated socially aswell.

Living. I chose to live at an Airbnb the first two weeks and found a place to stay during my first days by talking to one of the regulars showing us around at campus.

I lived in Kuchl near the campus where my classes were. I was already prior to arriving offered to live at Campus but chose to live privately instead. I chose this as I think it gives a more authentic experience to live with locals

and I also prefer the privacy and calmness. I lived in shared flats with regular students and enjoyed sharing meals and talks about anything. I payed around 400€ monthly which is around average prize.

Expenses and budget. I spent what I budgeted or maybe even a bit less. There are supermarkets nearby with prices around Danish prices. Prices for travelling in Austria can be a bit pricy, but for anyone under 26 they have discounted prices. Furthermore, I used money for going on excursions to the mountains by car, as I was privileged to have a car and friends with cars there.

Conclusion

I am glad I chose to go on an exchange at my third semester and am satisfied with the outcome of experiences, things I have learned and people I got to know.

Academically I had expected to learn more about timber construction than I have, but I am happy that I chose to have a broader range of classes in the end and learn a lot about different subjects not available at KEA.

I found Austrian people very welcoming and have enjoyed living in Austria and found it easy to settle. As mentioned earlier living in a small village and staying near to nature with so many possibilities has been one of the best experiences for me being abroad.

